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QUALCOMM INCORPORATED
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EXAMINER	
NGUYEN, TU X	

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MESSAY AMERGA and SUDHIR HALBHAVI

Appeal 2009-004971
Application 10/650,146
Technology Center 2600

Before MAHSHID D. SAADAT, KARL D. EASTHOM,
and ELENI MANTIS MERCADER, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

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[1] The two month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304 or for filing a request for rehearing as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1-18. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

STATEMENT OF THE CASE

Appellants' invention is directed to a wireless communications system for searching neighbor cells within a fixed time duration (Spec. ¶[[1010]).

Claim 1 is representative of the claims on appeal and reads as follows:

1. An apparatus, comprising:

a searcher for:

detecting a plurality of cells to form a ranked list of monitored cells;

searching each cell from a first list of cells during each of a series of cycles; and

searching each cell from a subset of a second list of cells during each of the series of cycles; and

a processor for:

ranking the list of monitored cells to form a ranked list of monitored cells;

selecting the first list of cells from the ranked list of monitored cells; and

selecting the subset of the second list of cells, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells, and the selected subset varying during each cycle; and

wherein:

the number of cells in the first and second lists for each cycle is determined from strength of a strongest cell from the ranked list of monitored cells.

Claims 1-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jeong (U.S. Patent No. 7,089,004 B2, issued Aug. 8, 2006) in view of Haumont (U.S. Patent Application Publication No. 2002/0032032 A1, published Mar. 14, 2002).

We make reference to the Brief (filed April 29, 2008) and the Answer (mailed July 11, 2008) for Appellants' and the Examiner's arguments.

ISSUE

The Examiner relies on the description of Figure 9 of Jeong for disclosing all the elements of claim 1 except for "ranking the list of monitored cells to form a ranked list" and determining the number of cells "from strength of a strongest cell from the ranked list," for which the Examiner relies on Haumont (Ans. 3-4).

With respect to claim 1, Appellants contend (Br. 4-5 (ellipses in original)) that Jeong fails to teach

> *searching each cell from a first list of cells during each of a series of cycles; . . . searching each cell from a subset of a second list of cells during each of the series of cycles; . . . selecting the first list of cells from the ranked list of monitored cells; and selecting the subset of the second list of cells, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells, and the selected subset varying during each cycle.*"

Appellants assert (Br. 5) that the search method of Jeong shown in Figure 9 allows searching a plurality of cells at a number of different search periods, i.e., each cell searched according to its own search time, which results in multiple search cycles of Cell 2 during which no other cells are scanned. Appellants further argue (Br. 6) that the portion of Haumont, relied on by the Examiner, "does not ascribe any specific functionality to the *strength of the*

strongest cell in a list, much less utilizing this strength to determine the number of cells to be allocated in a first and second list."

Therefore, the arguments made by Appellants present us with the following issue:

Did the Examiner err in rejecting claim 1 under 35 U.S.C. § 103(a) by finding that the combination of Jeong and Haumont renders obvious the claimed subject matter?

FINDINGS OF FACT (FF)

1. Jeong relates to an apparatus for efficiently monitoring and/or searching neighboring cells in a mobile network system to conserve battery power, wherein a list of cells transmitting the selected signals is. (Col. 2, l. 66–col. 3, l. 23.)

2. Figure 9 of Jeong is reproduced below:

FIG. 9

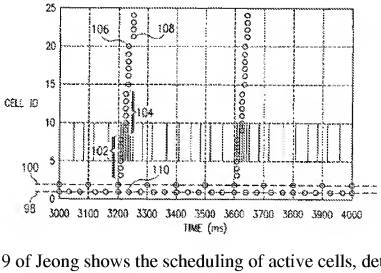

Figure 9 of Jeong shows the scheduling of active cells, detected neighbor cells, and undetected neighbor cells.

3. As shown in Figure 9, Jeong describes the cell search activity for 25 cells with a system having a search interval of 10 ms wherein active

cell (Cell 1), shown along the horizontal line 98, is measured every 40 ms and the detected neighbor cell (Cell 2), shown along horizontal line 100, is measured every 100 ms and every other detected neighbor cell measurement is scheduled simultaneously with the active cell measurement at 3000 ms, 3200 ms, 3400 ms, etc. There are no active cell measurements at 3100 ms, 3300 ms, 3500 ms, etc. The other 22 undetected neighbor cells (cells 3-24) are measured by a directed search every 400 ms measured simultaneously during a search interval (10 ms), as indicated by brackets 102 and 104. (Col. 10. l. 66–col. 11, l. 10.)

PRINCIPLES OF LAW

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Kahn*, 441 F.3d 977, 987-88 (Fed. Cir. 2006); *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

> Section 103 forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 406 (2007).

ANALYSIS

We do not agree with the Examiner's assertion (Ans. 6) that the cell scheduling of Jeong meets the disputed claim features. We understand the Examiner's position to be that the various search cycles specified in Jeong for the active group, the detected neighbor group, and every other group correspond to subsets of each group and overlap with the search cycle of

other groups (*id.*). The Examiner asserts that the arrangement of these search cycles meet the claimed "selecting the subset of the second list of cells, the second list of cells comprising the remaining cells from the ranked list of monitored cells not selected in the first list of cells, and the selected subset varying during *each cycle*" (Ans. 4 (emphasis added) (citations omitted)).

We agree with Appellants (Br. 5) that Jeong, as shown in Figure 9, discloses searching a plurality of cells "at a number of different search periods, each cell searched according to its own search time." Additionally, as asserted by Appellants (*id.*), the search chart shown in Figure 9 of Jeong shows multiple search cycles of Cell 2 during which no other cells are shown to be scanned. In other words, while there are some overlaps among the search cycle of different types of cells, Jeong does not show that a subset is selected and the selected subset varies during *each cycle*. *See* FF 1-3.

Therefore, because the disclosure of Jeong is limited to search cycles for separate groups of cells or subsets of a first list without disclosing or suggesting that both the subset and the first list are scanned (FF 1-3), and nothing in the disclosure of Haumont is identified to cure the deficiency of Jeong, we agree with Appellants' position that the combination of references does not render obvious the subject matter of claim 1. Accordingly, we do not sustain the 35 U.S.C. § 103 rejection of claim 1 and other independent claims 4 and 18, which include similar limitations, nor of claims 2, 3, and 5-17, which are dependent thereon.

CONCLUSION

On the record before us and in view of the analysis above, we find that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a) by finding that the combination of Jeong and Haumont renders obvious the claimed subject matter. For similar reasons, we also find that the Examiner erred in rejecting dependent claims 2-18.

ORDER

The decision of the Examiner rejecting claims 1-18 is reversed.

REVERSED

babc

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